

Marzano's Principles


Making Central Florida's Schools Successful

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Who is Dr. Robert Marzano?

- A leading researcher in education
- He is a speaker, trainer, and author of more than 30 books and 150 articles on a variety of education topics
- His books include:
 - *Designing & Teaching Learning Goals & Objectives*,
 - *The Highly Engaged Classroom, Formative Assessment & Standards-Based Grading*
 - *On Excellence in Teaching*
 - *District Leadership That Works*
 - *The Art and Science of Teaching*



Domain 1: Communicating Learning Goals & Feedback

Design Question 1: What will I do to establish and communicate learning goals, track student progress, and celebrate success?

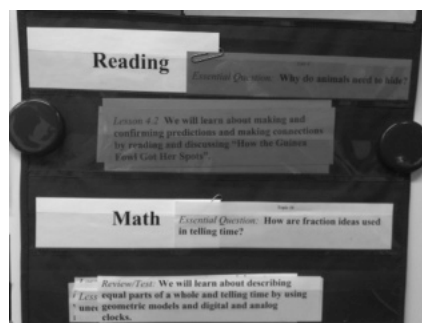
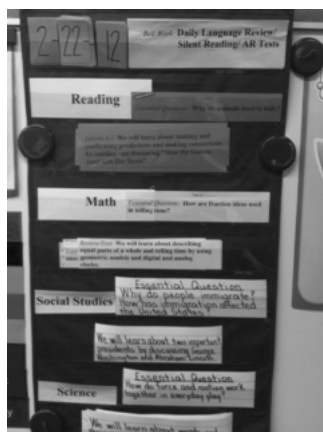
Setting & Communicating Learning Goals

- Teacher provides a clearly stated learning goal.
 - Students will be able to _____.
 - Students will understand _____.
- Learning goals are not activity based.
- Learning goals state what students will understand or know.
 - They are not measurable.
 - They do not include specific activities.

Figure 1.8. Learning Goals and Activities

Subject	Learning Goals	Activities
Science	Students will understand that <ul style="list-style-type: none"> ■ The sun is the largest body in the solar system. ■ The moon and earth rotate on their axes. ■ The moon orbits the earth while the earth orbits the sun. 	Students will watch the video on the relationship between the earth and the moon and the place of these bodies in the solar system.
Language Arts	Students will be able to <ul style="list-style-type: none"> ■ Sound out words that are not in their sight vocabulary but are known to them. 	Students will observe the teacher sounding and blending a word.
Mathematics	Students will be able to <ul style="list-style-type: none"> ■ Solve equations with one variable. 	Students will practice solving 10 equations in cooperative groups.
Social Studies	Students will understand <ul style="list-style-type: none"> ■ The defining characteristics of the barter system. 	Students will describe what the United States might be like if it were based on the barter system as opposed to a monetary system.

Learning Goals Must be Posted at ALL Times!



Example of Learning Goals

E: Students will be able to use technology to achieve a purpose.
 W: Students will be able to identify the Six traits of writing in anchor papers.
 R: V: Students will be able to use context clues to determine word meanings.
 F: Students will be able to demonstrate the ability to read grade level text.
 C: Students will understand the author's purpose in text.
 Students will be able to identify main ideas and supporting details in text.

Group Activity 1: Identify Learning Goals vs. Activities

1. *Students will be able to recognize the protagonist, theme, and voice of a piece of literature.*
2. *Students will produce a book report on a book of their choice, including a table of contents, with proper pagination and format throughout.*
3. *Given a set of coordinates, students will be able to graph the slope of a line.*

Tracking Student Progress

● Scales – Student Self Evaluations

- Must be highly visible
- Must be BIG
- Must be appropriate to the grade level
- Must be used in a manner in which student's self evaluation remains anonymous

Student Self Evaluation Scale Third Grade Example

Learning Goal Scale

4 = I could teach someone how to do it.

3 = I can do it on my own.

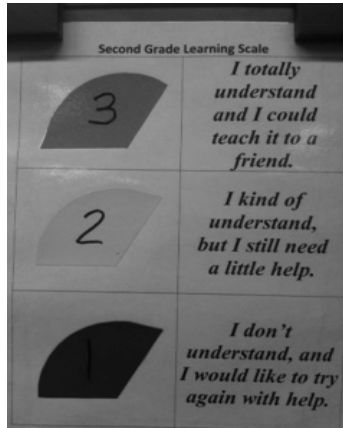
2 = I can almost do it on my own.

1 = I am starting to understand but I need a little help.

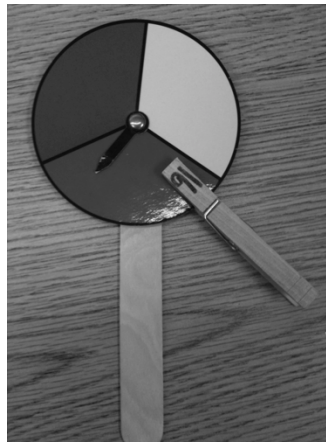
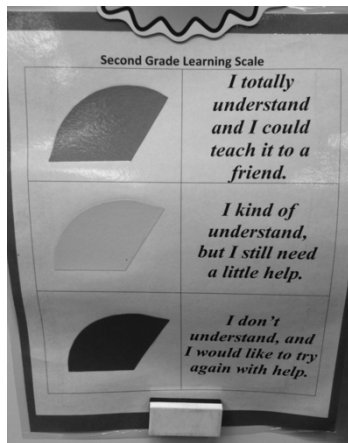
0 = I can't do it without help.



Student Self Evaluation Scale Second Grade Example



Student Self Evaluation Scale Kindergarten Example



Individual Activity 1

- Learning Goal: You will be able to distinguish between learning goals and activities.
- Learning Goal Scale
 - 4 = I could teach someone the difference between learning goals and activities.
 - 3 = I can distinguish between learning goals and activities on my own.
 - 2 = I can almost distinguish between learning goals and activities on my own.
 - 1 = I am starting to understand the difference between learning goals and activities but I need a little help.
 - 0 = I can't understand the difference between learning goals and activities without help.

Tracking Student Progress

- Scales/Rubrics: Teachers Evaluate Students
 - Students must know what they are being evaluated on
 - Can be applied to all content area topics
 - Must incorporate the learning goal
 - Students must be able to explain how the scale is used

FIGURE 1.11 Scale for Number Sense in 3rd Grade	
Score 4.0	In addition to Score 3.0 performance, in-depth inferences and applications that go beyond what was taught.
Score 3.5	In addition to Score 3.0 performance, partial success at inferences and applications that go beyond what was taught.
Score 3.0	<p>The student demonstrates number sense by</p> <ul style="list-style-type: none"> • ordering and comparing whole numbers (millions), decimals (thousandths), and fractions with like denominators • converting between equivalent forms of fractions, decimals, and whole numbers • finding and representing factors and multiples of whole numbers through 100 <p>The student exhibits no major errors or omissions.</p>
Score 2.5	No major errors or omissions regarding the simpler details and processes and partial knowledge of the more complex ideas and processes.
Score 2.0	<p>The student exhibits no major errors or omissions regarding the simpler details and processes:</p> <ul style="list-style-type: none"> • basic terminology, for example— <ul style="list-style-type: none"> • millions • thousandths • like denominator • factor • multiple • basic solutions, for example— <ul style="list-style-type: none"> • 5.15 is greater than 5.005 • $\frac{3}{4}$ is the same as 0.75 • 4 is a factor of 12 <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes stated in score 3.0.</p>
Score 1.5	Partial knowledge of the simpler details and processes but major errors or omissions regarding the more complex ideas and processes.
Score 1.0	With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.
Score 0.5	With help, a partial understanding of some of the simpler details and processes but not the more complex ideas and processes.
Score 0.0	Even with help, no understanding or skill demonstrated.

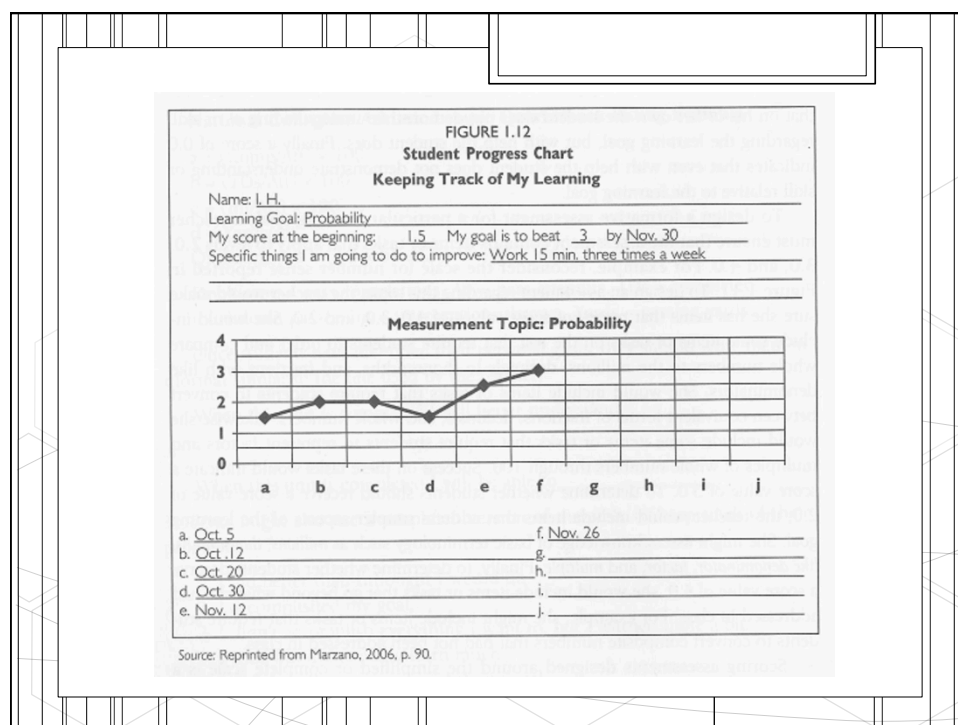
Source: Adapted from Martano & Haystead, in press.

Group Activity 2

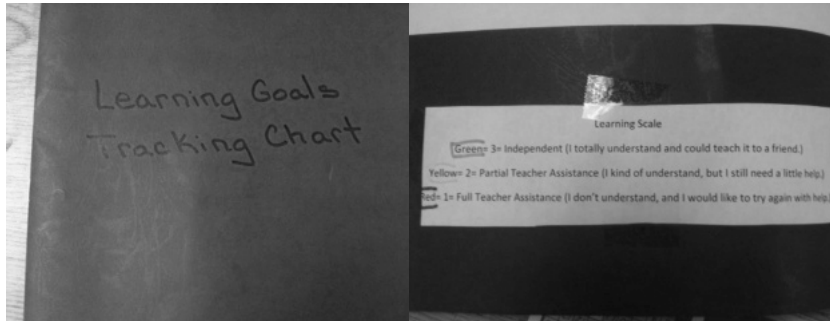
- Learning Goal: You will be able to create a scale for a learning goal for a second grade class.
- Choose your topic:
 - LG1: Students will be able to complete two-digit addition with regrouping.
 - LG2: Students will be able to identify the stages of the water cycle.
- Create a rubric for your chosen topic.
- Assignment Rubric for Group Activity
 - 3 = The group provides in-depth learning scale over and beyond requirements.
 - 2 = The group exhibits no major errors or omissions when creating the learning scale: 4 levels, title, grade appropriate
 - 1 = With some help, the group was able to demonstrate partial understanding of creating a learning scale.
 - 0 = Even with help, group could not create a scale for the learning goal chosen.

Celebrating Student Success

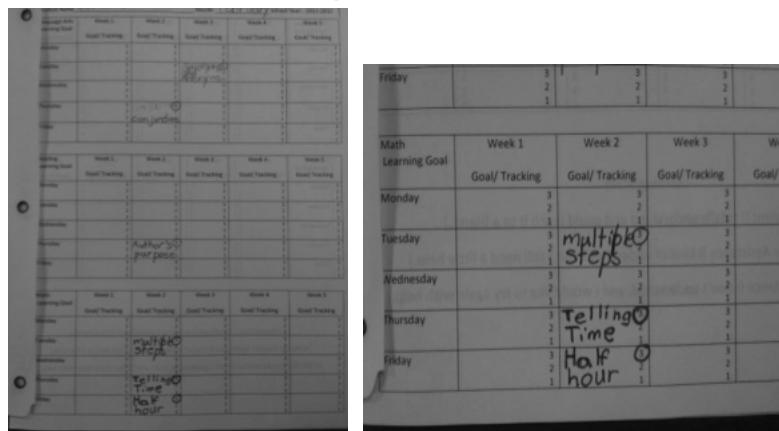
- Use formative assessment approach so students are able to see their own growth
- Students can plot their progress in a personalized folder
- Virtually every student will succeed in the sense that each student will increase his or her knowledge to specific learning goals
- Intrinsic motivation



Student Self-Tracking



Self-Tracking



Domain 1: Establishing Classroom Routines

Design Question 6: What will I do to establish or maintain classroom rules and procedures?

Classroom Management

- Teacher reviews expectations regarding rules and procedures to ensure their effective execution.
 - Open to alteration
 - Value student input
- More effective teachers spend a great deal of time establishing and reinforcing rules and procedures, whereas first year teachers typically spend little time.

Classroom Management

- Involves:

1. Organizing the classroom for effective teaching and learning
2. Establishing a small set of rules and procedures
3. Interacting with students about classroom rules and procedures
4. Periodically review rules and procedures, making changes as necessary
5. Use classroom meetings

Domain 2: Planning and Preparing

Includes Planning, Preparation, Technology, and Accommodations

Planning and Preparing

- Lesson plans include important content identified by the district (scope)
- Lesson/Unit plans include the appropriate manner in which materials should be taught as identified by the district (sequence)
- Use of Technology is mentioned and explained
- Accommodations/adaptations for SWD and ELLs are included in the lesson plans

Technology in the Classroom

Reading	Writing	Math	Science
Elmo/Projector: daily <ul style="list-style-type: none"> • HW & reminders • One-to-one computers for AR tests to increase comprehension. • HCQ question for cooperative learning/reference. • Kagan timer cooperative groups for students to pace themselves. 	Elmo/Projector: daily <ul style="list-style-type: none"> • HW & reminders 	Elmo/Projector: daily <ul style="list-style-type: none"> • HW & reminders • Examples for class discussion and explanation of concepts. 	Elmo/Projector: daily <ul style="list-style-type: none"> • HW & reminders
<ol style="list-style-type: none"> 1. Vocabulary definitions for whole class participation. 2. Paddock for whole class preparation for FCAT. 3. Provide visual cues for increased comprehension. 	<ol style="list-style-type: none"> 1. Display examples of work 2. Model writing pieces or grammar skill 3. Kagan timer cooperative groups 4. TSW edit or complete examples projected on board 	<ol style="list-style-type: none"> 1. display manipulatives 2. websites with interactive games to provide additional practice of skills 3. Paddock for while class preparation for FCAT. 4. BrainPop for increased understanding of concepts 	<ol style="list-style-type: none"> 1. Interactive Think Central website to provide S with virtual labs. 2. Provide visual clues for increased comprehension. 3. BrainPop for increased understanding of concepts.

Accommodations Example

T H U R S D A Y	<u>SWD</u> <i>Student Name</i> <ul style="list-style-type: none"> Extended Time Flexible Setting Flexible Presentation 		MEDIA	Poetry Unit: Poetry Book – Students will receive rubric for expectations of Poetry Book. Begin Concrete Poem- Students will be introduced to Concrete poems. Students will pick a topic and begin drafting a concrete poem. #4.4.1.2
	<u>504</u> <i>Student Name</i> <ul style="list-style-type: none"> Extended Time Flexible Setting 		PE	Poetry Unit: Continue Concrete Poem- Students will peer edit poems and write final draft of Concrete poem. #4.4.1.2

Domains 3 and 4: Reflection and Professionalism

Reflective practice and Collegiality

Reflecting on Teaching

- Identifying areas of strength and weakness
- Evaluating effectiveness of individual lessons and units
- Evaluating effectiveness of specific pedagogical strategies and behaviors
- Development of an effective growth plan with progress monitoring



Collegiality and Professionalism

- Demonstrating positive interactions with colleagues, students, and parents
- Seek mentorship for areas of need or interest or mentor other teachers
- Share ideas and strategies that are effective
- Adhere to district and school policies and procedures
- Participate in district and school initiatives

iObservation

What is iObservation and why is it important to you?

Evaluating Teachers

- iObservation
 - The only system featuring frameworks of Dr. Marzano and other researchers to develop teacher and leadership effectiveness
 - Used in both Orange and Seminole Counties
 - Administrators do both formal and informal observations and evaluations using an iPad or computer

First Aid Sheet

- This is your **LIFE-SAVER!**
- This paper included everything you should do immediately upon a visit from an administrator to your classroom.

References

- http://marzanoresearch.com/About/about_dr_marzano.aspx
- <http://www2.ed.gov/programs/racetothetop/index.html>
- <http://www.scps.k12.fl.us/employees/TeacherEvaluationFeedback.aspx>
- <https://www.ocps.net/es/hr/PDS/assessment/Documents/Evaluation%20Manual%202011%20final%209%2029%2011%20revision%2010-16-11.pdf>
- Marzano, R. (2007). The art and science of teaching. Alexandria, VA: ASCD.
- Internship Supervising Teachers